





## **Introduction**

The 2020-21 school year was a year of unprecedented challenges and difficult decisions for most education leaders. As the pandemic raged on, school and district leaders struggled with decisions about school formats, making accommodations and adjustments to meet the changing health conditions in their community and new safety mandates. Correspondingly, the leaders wrestled in light of those decisions with concerns about student and staff emotional well-being and physical health. While many teachers, parents and students became more comfortable with the rhythm of remote digital learning during the past year, others still yearned for the tone and tenor of the traditional face-to-face classroom. The end of the school year and beginning of summer led school and district leaders to be cautiously optimistic about the 2021-22 school year. Some educators were fueled by a nostalgia to get back to the normalcy of "real school" and others brimmed with new ideas and programs for their schools. For educators from both perspectives, it cannot be denied that the experiences of the past 18 months and the lessons learned from that experience are influencing their mindset and plans for approaching the new school year.

A key input to understanding the impact of the experience of the past two school years is to reflect on how the pandemic and the implementation of new school models affected students' perceptions of school and learning, and their aspirations for greater agency in their educational destiny. As long documented in other Speak Up™ Research Project reports, too often educators make assumptions about students' preferences based upon their own adult-centric world view, rather than truly appreciating the authentic lived experiences of students themselves. Those assumptions can lead to decisions that are not necessarily in alignment with student needs, expectations, or aspirations. One example of how that is playing out for this new school year includes decisions being made by education leaders about whether to offer students a virtual school option. Are superintendents and school boards making those decisions based upon really understanding the preferences or needs of students and their parents, or are they predicating those judgements upon their own belief systems about face-to-face instruction as being best for all students?

"We do not learn from experience... we learn from reflecting on experience."

- John Dewey, American Educator and Author (1938)

Meaningful reflection often begins with important questions. To help inform critical decisions for the 2021/2022 school year and beyond, this year's digital learning trends report from Project Tomorrow® and Blackboard focuses on "Five Important Questions Every Education Leader Should Ask Today." The questions propel us to think critically about what student agency and engagement really mean for today's students. To support that critical reflection, we tap into the authentic feedback of over 50,000 K-12 students, parents, teachers, and administrators who participated in Speak Up 2020-21. This data provides research-based insights that can both clarify the needs of students and help educators see new solutions. Central to this reflection process is a spotlight on the authentic lived experiences of our students over the past 18 months even where those experiences seem to belie popular assumptions or media stories. By asking the important questions, challenging the representativeness of anecdotes and myths, and translating the views of students into actionable knowledge, education leaders are potentially better armed to not only address the current challenges in the post-pandemic school environment, but provide a clearer path to improving educational opportunities for all students.

The reality of current teacher and administrator concerns is not lost, however, especially as those concerns relate to health issues, learning continuity, recovery, and acceleration. Rather, the goal for this year's digital learning report is to recognize those concerns as starting points for creating new opportunities for addressing equity in education. Since the start of the Speak Up Research Project in 2003, the goal has always been to help education leaders like you make the best decisions by leveraging a key community asset: the views of your stakeholders. This year, more than ever before, we feel a strong pull to that mission and hope that this report not only informs your decisions and plans, but also provides a new framework for thinking how to improve learning experiences for all students by doubling down on student agency and engagement.

"It has become aboundingly clear during the pandemic that students are in charge of their own learning. It always has been actually but now everyone just knows it."

- 11th Grade Student (2020)



FINDINGS FROM THE 2020-21 SPEAK UP RESEARCH PROJECT

# **The 5 Important Questions Every Education Leader Should Ask Today**

To guide our reflection on the importance of student agency, engagement and equity, this year's digital learning trends is structured around these five important questions. Each question is addressed individually in this report with current and longitudinal Speak Up research findings to inform and inspire your work. To continue this process of opening our collective eyes to understanding the student vision for learning, we have compiled a list of additional considerations and suggestions that can be an effective starting point for new local conversations within your communities. We would enjoy the opportunity to continue these important discussions with you as well.



- What has been the impact of remote learning and digital learning formats on students' perceptions of school and education?
- Are our students more or less engaged in school today?
- What types of learning experiences do students want and prefer?
- What can your school or district do to meet the needs, expectations, and aspirations of students for a more equitable and engaging learning experience?

### Important Question #1: How does technology support student learning and agency across a variety of educational settings and classroom formats?

As discussed in our series of Speak Up executive briefs about the sudden shift to digital learning in spring 2020, **90 Days that Changed K-12 Teaching and Learning**, the use of technology took on a more predominant role in education to support the continuity of learning during school closures. In some communities, remote learning facilitated through screens continued through the 2020-21 school year as well. Whereas some point to this dependency on technology for learning as a sea change in education, the difference today compared to 2018 is actually highly nuanced. Students have long had access to technology to support learning in their classroom. In 2018-19 only 15% of teachers said that their students do not have some level of regular access to mobile devices to support learning at school with little differentiation by grade level. At that time, many schools had already embraced a 1:1 program where students were personally assigned a Chromebook, laptop or tablet to support classwork and learning experiences. Most devices were designated however for in-school usage only and could not go home with the student to support homework. In many classrooms, teachers still had to reserve a cart of devices that could be used by students for a particular unit or lesson activity only.



In 2018-19 school year, only 41% of school principals reported that they provided their students with devices to use at school and to take home for extended learning. More telling was the 50% of principals who said that they had no plans in the immediate future to allow students to take school-owned devices home.

With a goal to ensure continuity of learning for students when the school building was closed, many schools over the past 18 months however changed those policies and supported device take home programs. Fast forward to 2020-21 and now nearly 9 in 10 principals say that school owned devices are individually assigned to students to use at school and students are allowed to take those devices home with them also. To further support learning, 75% of school principals report that their schools also have a WiFi hotspot loaner program in place to provide home Internet connectivity where needed. The shift in policy and implementation strategy was supported significantly by federal and state pandemic relief funding legislation which empowered districts with investment dollars to purchase devices for student use at home. Continued pandemic relief funding including a new rule about the use of e-rate funds also supports the expansion of these programs today. This continued emphasis on ensuring that students have the tools they need to support learning, both in school and beyond the classroom, is still necessary. Prior to the pandemic, approximately 13% of middle school and high school students reported being impacted by the "homework gap" where they did not have access to the technology and connectivity needed to support out-of-school learning. While the investments and changes in policies have impacted the access many students have to technology outside of school, 9-11% of students in grades 6-12 continue to say that they experience the homework gap on a regular basis.

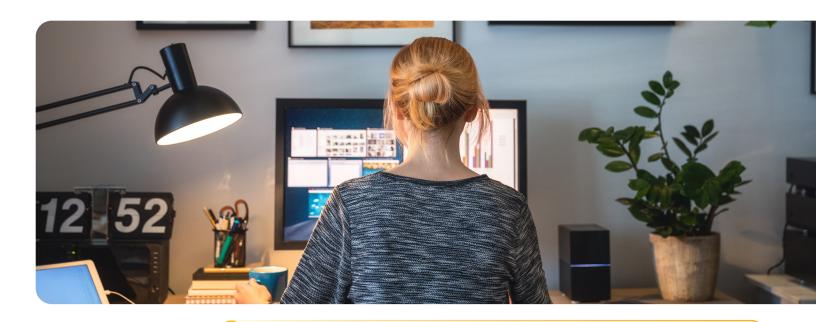
The prevailing view, reinforced by the reporting from school and district administrators, is that students from kindergarten through high school are likely to now have a personally assigned laptop, Chromebook or tablet available to them to support learning. The key difference compared to 2018-19 school year is that the devices are personally assigned to students, and the students have the ability to take those devices home. An indelible media image from the pandemic and remote learning, however, is that of a Kindergarten student participating in a virtual classroom lesson through their school-provided iPad. For many people, this image seemed incongruous and even unsettling. The visualization of the use of technology by our students, even our young learners, seemed to stand in stark contrast with adults' assumptions about school and learning in 2021.

### Is this true? The increased access to technology has changed the ways teachers teach and the way students learn.

While students have definitely enjoyed increased access to mobile devices to support learning over the past two years, the frequency of teachers' use of various digital tools and resources this year was at the same or similar levels as reported in 2018-19 school year. For example, in 2018, 62% of teachers said they were using an online curriculum with their students on a weekly basis, in 2021, 66% of teachers say the same. Correspondingly, the percentage of teachers who say they use online collaboration and productivity tools, online tests, digital textbooks and streaming videos on a weekly basis with their students was also consistent over the past three years. The pandemic and adoption of remote learning may have made access to these digital tools more accepting and universal but teachers' overall usage of the tools within their lessons did not significantly change. Rather the technology has provided an efficient vehicle for online video conferences, posting homework assignments and communications between home and school, but not necessarily as a way to transform the education process.

With the value of hindsight today, it is acknowledged that the suddenness of the shift to virtual learning created less than ideal learning experiences for some students. Teachers' lack of familiarity with how to facilitate meaningful online learning, inequities in access to technology tools at home, and the new burden placed on parents and education guardians to supervise and direct at home learning were contributing factors. In many cases, pundits as well as parents even pointed to the dependency on the use of technology in remote learning as the culprit to explain why some students were supposedly less engaged in learning during school closures. Still the conventional wisdom for many is that students in fully online learning environments used technology more frequently than their peers in fully face-to-face classrooms. With the increased emphasis on putting a device in the hands of every student and the facilitation of remote classrooms over the Internet, it was reasonably presumed that students in remote learning were using online resources more than other students.





Is this true? Students in fully remote learning environments use digital tools more frequently than students in fully face-to-face classrooms.

The analysis of the Speak Up Research data points to a surprising conclusion. Informing this conclusion is data collected from middle school and high school students during the 2020-21 school year that has been disaggregated based upon the most popular school formats in place across the nation. Three cohorts of students were identified for data analysis:

- Students attending school in 100% virtual learning environments
- Students in a hybrid learning environment where some days were online and other days were in a physical classroom
- Students attending school in a fully in-person classroom with no virtual learning experience

The key findings from this analysis of student technology use across different educational settings and school formats (Table 1) include:

- Across all three formats, approximately three-quarters of students in grades 6-12 say they used an online curriculum within their learning experiences. That included 75% of high school students in virtual classes as well as 75% of high school students in fully face-to-face classrooms.
- Students have been reporting for several years about the frequency of taking online tests or assessments. That trend continues again this year with over two-thirds of students reporting that they take online tests often. Students in fully virtual environments were no more likely to take online tests than students in fully face-to-face classes.
- High school students participating in fully in-person classes were slightly more likely to use online collaboration tools to create documents to share with classmates and teachers than their peers in fully virtual or hybrid learning situations. There was no difference for middle school students however across the three school formats.

Table 1: Students' frequency of tech tool usage disaggregated by school format

Tech tool usage for learning by frequency		Fully virtual learning environments		Hybrid learning environments		Fully face-to-face learning environments	
		% of students who report this frequency of usage					
		Gr 6-8 students	Gr 9-12 students	Gr 6-8 students	Gr 9-12 students	Gr 6-8 students	Gr 9-12 students
Using an online	Never	26%	25%	27%	27%	28%	26%
curriculum	Sometimes	49%	49%	52%	53%	46%	52%
	Often	25%	26%	22%	20%	25%	23%
Taking	Never	3%	2%	3%	2%	4%	2%
online tests	Sometimes	30%	21%	29%	26%	32%	26%
	Often	66%	77%	68%	72%	64%	72%
Creating online documents	Never	19%	14%	16%	9%	18%	8%
to share with others	Sometimes	53%	41%	56%	42%	55%	35%
	Often	28%	45%	28%	49%	27%	57%

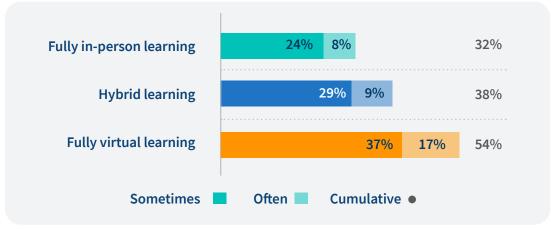
As illustrated in Table 1, the frequency of students' use of certain digital learning resources for the most part did not differ significantly based upon their school format. Students across all three formats also report parity in using a mobile device to read online books and articles and to set up reminders and alerts on their devices for upcoming tests, homework or project due dates.

However, differences in usage frequency are apparent when examining the use of digital tools for teacher-student communications. The most popular digital means for communication continues to be two-way personal email exchanges between students and teachers. Across all school formats, 89% of students said they email their teachers with schoolwork questions. This focus on email as a communication tool between students and teachers pre-dates the pandemic and remote learning.

The use of text messaging as an efficient and effective communication tool has emerged as a student and teacher favorite now. As reported in last year's 90 Days that Changed K-12 **Teaching and Learning** reports, the shift to remote learning in spring 2020 precipitated an increase in two-way teacher-student communications via text messaging. Prior to the pandemic in fall 2019, only 38% of high school students said they were texting regularly with their teachers about schoolwork questions. By spring 2020, however, that percentage had increased to 69% of students and teachers using text messaging as a regular communication modality.

In terms of communications tool usage, school format does appear to be an influencing factor especially relative to text messaging. As depicted in Chart A, high school students in fully virtual learning environments (54%) were almost twice as likely to report using text messaging to communicate with their teachers than students in face-to-face instructional settings (32%).

Chart A: High school students' frequency of text messaging to communicate with teachers disaggregated by school format



This difference in behaviors may be explained in several ways. Texting provides for the type of quick and pragmatic communication between student and teacher that is often more practical in remote learning situations. Students in physical classroom environments (hybrid and fully in-person learning) may have more informal access to teachers in their classroom to ask questions, before, after and during class. Additionally, after being relaxed during remote learning, schools may have reinstated policies that prohibit student-teacher texting with the return to in-person learning. Texting may also be more closely aligned with how students are self-directing their learning experience in a fully virtual classroom compared to other communication tools. Students in fully remote learning experiences this past year state that a key benefit of virtual learning is that they are more comfortable asking their teachers questions. Students reported also feeling a stronger sense of self-agency in remote learning in the 2020/2021 school year.

Across all school formats, students continue to be highly interested in having personal 1:1 communication with their teachers when they have a question about schoolwork or need support on homework. When asked to identify the most effective ways to communicate with their teachers, high school students identified personal emails (67%), mobile app with conversational capabilities (61%) and text messaging (54%) as the most effective modalities. These preferences were true for students regardless of their school format. Comparatively, only 30% of students say that going to a school or class website or portal is an effective way to get information.

Providing every student with a tablet, laptop or Chromebook to use for learning creates a potential environment for students to take greater control of their learning destiny. Educators have long connected access to mobile devices with increased student agency. Over three-quarters of school principals (79%) say that putting a device in the hands of a student can have a positive impact on their ability to self-direct their own learning. But the true measure of that effectiveness, however, must include a more comprehensive understanding of the types of digital apps, resources and content used on the devices and how teachers are embracing all of these tools to support student learning. Teachers and students in remote learning settings are establishing new paradigms for communications that are not only efficient but support the development of students' self-directed skills.

### Important Question #2: What has been the impact of remote and virtual learning on students' perceptions of school and education?

Much has been written and discussed across popular platforms and on social media over the past 18 months about the impact of the pandemic on students' interest and engagement in school and learning. Education and policy leaders are particularly invested in a series of assumptions about the relationship between different school formats and students' interest in school. These assumptions are also being used as the foundation for decisions around school formats for the 2021-22 school year.

Is this true? How students experienced school over the past two years is impacting their views on the value of school and learning.

On the annual Speak Up surveys, students are asked their level of agreement with different statements about school and learning. This data helps school and district leaders understand how their policies and programs may be impacting school climate issues for students. Many districts use this Speak Up data for state reporting on school climate. It is valuable within the context of this report to examine this data comparatively across the three primary school formats in place during the 2020-21 school year and over time to understand if the pandemic and shift in learning formats possibly impacted students' attitudes about school. The key findings from this analysis are as follows:

- **★** Students want to do well in school; 81% of students in grades 6-12 say this is true for them (Table 2). But this valuation has not changed as a result of the pandemic. In 2016, 81% of students in grades 6-8 and 82% of students in grades 9-12 said that doing well in school was important to them. Students understand the importance of school. Additionally, that valuation was not impacted by their school format over the past year. A similar percentage of students in all three formats agreed with this statement about the importance of doing well in school.
- But only 41% of students in grades 6-12 say they are interested in what they are learning in school. Just as many students in fully virtual classrooms as in physical classrooms report that they are not interested most of the time in what they are learning in school (59%).
- Only 45% of students believe that what they are learning in school is important for their future. School format does not appear to contribute to that perspective either. Despite aspirations for doing well in school, over 55% of students do not value their school-based learning process, regardless of school format, as interesting or valuable for their future.



Table 2: Students' attitudes about school disaggregated by school format

Value statements about school and	Fully virtual learning environments		Hybrid learning environments		Fully face-to-face learning environments	
learning	% of students who agree with each statement					
	Gr 6-8 students	Gr 9-12 students	Gr 6-8 students	Gr 9-12 students	Gr 6-8 students	Gr 9-12 students
"Doing well in school is important to me."	75%	81%	77%	84%	81%	85%
"Teachers are important to my learning."	48%	47%	50%	54%	53%	57%
"I am interested in what I am learning in school."	41%	38%	42%	41%	41%	44%
"What I am learning in school is important to my future."	43%	41%	47%	43%	48%	46%

Despite conclusions raised in some policy circles, social media sites or cable opinion news, these student perspectives do not appear to be the byproduct of the pandemic or the shifts in learning formats. Rather, students' attitudes about school and the value of the learning experience in school has not significantly changed in the past four years, thus refuting the position that the pandemic negatively influenced school perceptions or students' valuation on school. The data displayed in Table 3 documents the level of student agreement and disagreement with statements about the value of school and the student's experience in school. For example, on average over 4 years, only 42% of middle school students (students in grades 6-8) say they are interested in what they are learning in school, and 49% say they wish their classes were more interesting.

Table 3: Grade 6-8 students' attitudes about school over time - 2017 - 2021

Attitudes about school		% of student agreement and disagreement with each statement				
		2017-18	2018-19	2019-20	2020-21	
"I am interested in what I am learning in school."	Agree Disagree	<b>41</b> % <b>59</b> %	41% 59%	46% 54%	41% 59%	
"I wish my classes were more interesting."	Agree Disagree	45% 55%	46% 54%	58% 42%	48% 52%	
"What I am learning in school is important to my future."	Agree Disagree	47% 53%	46% 54%	54% 46%	47% 53%	

© Project Tomorrow 2021



These statistics should not be interpreted to mean that students are not interested in learning. Quite the contrary. Students are very interested in learning how to do things (70% of high school students), learning about new ideas (64%) or how make or build something (52%). Students are also very interested in learning experiences where they can be in control of the learning process; that quite often includes the types of self-directed learning experiences students are initiating outside of school. These self-directed learning experiences appear to a common bond across students from different communities also. Students in urban (80%), rural (78%) and suburban (80%) communities, for example, report regularly researching information online to learn more about topics that interest them, not just for homework. Correspondingly, girls (83%) are just as likely as boys (85%) to say that they seek out online videos to learn how to do things that are of interest and value to their lives. These students are engaged in their own initiated, self-directed learning activities that have value and purpose for their lives.

### Important Question #3: Are our students more or less engaged in school today?

Educators are very familiar with the longstanding research on the connection between student engagement in learning and their academic achievement. For that reason, evaluating the level of student engagement in school is a particularly important goal when assessing the impact of different learning interventions including new products, resources, models and approaches. Understandably, school and district leaders were concerned about the impact of the pandemic and remote learning on students' ongoing engagement in the learning process. Many wonder if teachers' lack of skills with effective technology integration may be a detriment to student engagement especially in virtual learning settings.

Teacher comfort with creating engaging, online learning experiences varied widely in the first few months of school closures as teachers experimented with trying to retrofit old practices on new digital platforms. Some efforts were more successful than others but for many teachers, the experience of using technology as the learning platform resulted in new skills and greater confidence in digital teaching. For example, 37% of teachers this year said they were very comfortable using technology to personalize learning for students in their class; only 21% of teachers said the same in the 2019-20 school year. Additionally, 44% of teachers report that as a result of the remote learning experiences, they now understand how to effectively engage students in learning when that learning modality is online.

Consequently, just as teachers' embrace of new teaching methods varied, so did students' experiences with online and virtual learning. For many this was their first experience not only with online learning, but with being responsible for their own learning. The ability to self-direct one's own learning is a skill that needs to be explicitly developed with students, in the same ways that teachers are increasingly helping students develop critical thinking or teamwork skills. The experiences of remote learning have taught us about the importance of all students developing the skill of self-directed learning. The absence of a teacher directing the learning process or providing students with a constant stream of feedback had a negative impact on some students' perceptions of their self-efficacy as a learner. As one high school student commented in spring 2021, "I don't know how to learn without my teacher telling me what to do."

### Is this true? Students' lack of engagement in school is the result of remote learning.

A widely promoted theory has been that students' lack of engagement in school is the result of remote learning. But is that true? A key lesson learned from the pandemic and the shift to remote learning is that for too many students, school is not intrinsically motivating. Compliance for many students was the motivation to go to school, show up in class, and participate at least nominally in the learning activities. Without the compliance factor and the extrinsic rewards associated with going to school, some students lacked the internal motivation to regularly engage with teachers and classmates in virtual classrooms. Remote learning did not create this problem, however. It simply opened our eyes to an existing situation that many schools and communities have simply not addressed previously - the lack of student engagement in learning in school.

Middle and high school students are asked on the annual Speak Up surveys about their level of agreement with this statement: "I am engaged in what I am learning in school most of the time." Table 4 documents the responses from students from the 2019-20 and 2020-21 school years. The bottom line from this data is sobering. Approximately 50% of students in grades 6-12 say they are engaged in learning most of the time when they are in school; another 50% say they are not.

Table 4: Students' engagement with learning in school

"I am engaged in what I am learning in school most of the time"		% of student agreement and disagreement			
		2019-20 s	2020-21 school year		
		Before school closures	During school closures	2020 21 3011001 year	
Students in grades 6-8	Agree Disagree	54% 46%	55% 45%	49% 51%	
Students in grades 9-12	Agree Disagree	47% 53%	49% 51%	50% 50%	

© Project Tomorrow 2021

As evidenced by this data, students' engagement with what they are learning in school was the same before remote learning and during remote learning. And that same lack of interest with school learning persisted in this most recent school year as well. The wakeup call for school and district leaders is that the traditional school environment and learning modalities may only be working for half of your student population. This obviously speaks to many of the larger issues facing our schools and communities regarding how to effectively provide equitable learning opportunities and experiences for all students, even those for whom the traditional paradigms of education simply do not fit or for whom institutional inequities in education have had the largest impact. The relationship between how students feel about their school environment and their level of engagement in the learning process is inevitably tightly connected. This is particularly evident when examining the lived experiences and beliefs of students of color. Students of color in majority minority schools are less likely than students in majority white schools to say that they are engaged in what they are learning, that their school cares about them as a person or that there is an adult at school that they trust (Table 5).



Table 5: Students' beliefs about school - disaggregated by school student population demographic

Beliefs about school		% of Grade 6-12 student agreement and disagreement with each statement			
·		All students	Students in schools where the majority of the student population is white students	Students in schools where the majority of the student population is students of color	
"I am engaged in what I am learning in school most of the time."	Agree Disagree	50% 50%	51% 49%	43% 57%	
"I believe that my school cares about me as a person."	Agree Disagree	<b>40</b> % <b>60</b> %	41% 59%	33% 67%	
"There is at least one adult at school that I trust."	Agree Disagree	59% 41%	61% 39%	51% 49%	

While it is sobering that only 40% of students in grades 6-12 across all demographics believe that their school cares about them as a person, we also cannot look away from the reality that only one-third of students of color (33%) believe this is true for their school. It is unreasonable and must be unacceptable to expect students to be engaged in learning when they do not believe that their school cares about them individually. But that does not make it acceptable. As noted earlier, our discussions about equity must be about more than providing students with a Chromebook and a hotspot; we must seriously evaluate the culture of our school and its related impact on the quality fo the learning experience for all students.

### **Important Question #4:** What types of learning experiences do students want and prefer?

The Speak Up reports have long documented three key characteristics that students highly value in their learning experiences:

- Socially based learning experiences that provide opportunities for collaboration with A peers and others.
- В Making connections between academic content and real-world issues and problems.
- C Opportunities to leverage a wide variety of digital tools and resources as a way to expand their access to knowledge while also developing important college and workplace skills.

These characteristics are still evident in the aspirational views of students today. Increasingly though students identify another essential component of their ultimate learning experience - the ability to be in control of how, when and where they learn. This preference for a school culture where self-directed learning is the norm is valued by 55% of high school students. Amongst students who say that they wish their classes were more interesting at school, 60% identify this learning preference. For students who report they are worried that they may not be learning the right skills in school for future success, 63% also aspire to more self-directed learning experiences in school. In concert with the other key characteristics, the student vision for



learning indicates that students want greater agency and determination around their learning pathways.

In many ways, the experiences of the past two school years with virtual learning provided an interesting laboratory environment for not only testing out the advantages and challenges of facilitating online school but also a way for educators to become better attuned to student preferences for learning. And to understand that the long held assumptions being made by adults about student preferences and the types of experiences that foster student engagement and agency in school may not be valid today.

Is this true? The preferred learning environment for students is in a face-to-face classroom with a teacher and classmates in person.

Students were asked this year on the Speak Up surveys to identify based upon their experiences the pros and cons, benefits and challenges of virtual remote learning (Tables 6 and 7). As noted earlier, student data was disaggregated based upon the primary school format for the year: fully virtual, hybrid model or fully in-person. Key findings on the value of remote virtual learning from the student point of view include:

- The positive views on the value of virtual learning were very consistent regardless of the students' current school formats. For example, 63% of students in fully virtual classes last year said a top benefit was being able to learn at your own pace; 64% of students in fully in-person classes said the same about virtual learning.
- The benefits share a common focus on how virtual learning changes the student learning experience including putting a higher value on self-directed learning.
- Students who are in fully face-to-face learning environments have stronger negative perceptions about the challenges or downsides with virtual learning than students who were actually experiencing learning virtually. For example, while 56% of students in fully in-person classes said virtual learning was less in interactive or engaging than in-person instruction, only 45% of students in virtual learning held that same belief.

Table 6: Students' views on the benefits of virtual learning by school format

Benefits of virtual learning	Fully virtual learning environments	Hybrid learning environments	Fully face-to-face learning environments			
	% of students who agree with each statement					
	Gr 6-12 students	Gr 6-12 students	Gr 6-12 students			
Can learn at your own pace	63%	68%	64%			
Less school drama	63%	60%	63%			
Can develop technology skills	57%	57%	53%			
Learn to be responsible for your own learning	49%	53%	54%			
Easier to review class materials whenever you wanted	40%	41%	37%			

Table 7: Students' views on the challenges of virtual learning by school format

Challenges of virtual learning	Fully virtual learning environments	Hybrid learning environments	Fully face-to-face learning environments			
	% of students who agree with each statement					
	Gr 6-12 students	Gr 6-12 students	Gr 6-12 students			
Doesn't fit the way some students learn	61%	67%	70%			
Miss social aspects of school	56%	62%	67%			
Harder to collaborate on projects with classmates	51%	56%	57%			
Less interactive and engaging	45%	53%	56%			
Lack of teacher support when needed	40%	45%	52%			

© Project Tomorrow 2021

School principals were also asked to identify the pros and cons of virtual learning. The differences in the views of principals and students are illustrative in many ways of the larger gulf that exists between adults and students about learning preferences. For example, two-thirds of middle and high school students across all three school formats identified their ability to learn at their own pace, a key component of self-directed learning, as the top benefit of virtual learning. Only 49% of principals felt that was a benefit indicating a possible misunderstanding about the importance of student agency and self-determination as a goal for today's students. Additionally, only one-third of principals (38%) valued the virtual learning experience as a way for students to



develop college-ready skills. Given that online classes have been a fixture on many college campuses for several years, this lack of appreciation for this experience may be shortsighted. The top benefits of virtual learning identified by the principals include:

- **1** Students will develop technology skills (66%)
- 2 Students learn to be responsible for their own learning (55%)
- 3 Students can learn at their own pace (49%)
- Less school drama (45%)
- Students can learn skills to use in college (38%)

Correspondingly, some of the challenges that the principals identified also did not align with the student perspective on virtual learning. Nine out of ten principals (90%) said that the primary downside to virtual learning was that students missed the social aspects of school. Actually, only 56% of the students in virtual learning said that was a challenge. School principals may be out of step on that value proposition. Whereas school used to be the exclusive center of students' social lives, that is no longer the case. As a high school student noted, "I don't need to go to school to see my friends or have a social life. I can do a lot of that via social media." Other cons of virtual learning reported by the principals include:

- **1** Miss social life at school (90%)
- 2 Doesn't fit how some students learn (86%)
- **3** Miss school routines (75%)
- 4 Less interactive and engaging (65%)
- 5 Concerns about quality of the learning experience (62%)

As school is getting started for the 2021-22 school year, some school districts are offering their students a virtual academy or virtual school option. Whether this is in response to continuing health concerns or administrators' really understanding the preferences of their students for these types of learning experiences is hard to assess. But the evidence is compelling that for some students the virtual experience may be a preferred option. When asked their level of agreement about where they learn best, 27% of students in virtual learning environments and even 16% of students in fully in-person classrooms chose a virtual classroom setting (Table 8).

Table 8: Students' views on where they learn best – by school format

School formats	All students	Students in fully virtual learning environments	Students in hybrid learning environments	Students in fully in-person learning environments
		% of Grade 6-1	L2 students who agn	ee
"I learn best in a virtual classroom setting with my teacher and classmates."	17%	27%	19%	16%
"I learn best in a physical classroom setting with my teacher and classmates."	65%	52%	66%	72%

© Project Tomorrow 2021

This conversation about the types of learning experiences that are best for individual students gets directly at the heart of many equity considerations. As we think about how to best address the implicit and explicit inequities in education, it is important to think beyond providing every student with a Chromebook as the proof case for equitable education. Equity in today's learning ecosystem must include a recognition of not only what our schools are providing to students, but how well we are addressing what our students need in terms of the types of individual learning experiences that can allow every student to be well-prepared for future success.



**Important Question #5:** What can your school or district do to meet the needs, expectations, and aspirations of students for a more equitable and engaging learning experience?

In his seminal work, Experience and Education, John Dewey explains that we learn not just by chronicling or documenting an experience, but by seriously and thoughtfully reflecting on how that experience may have changed our perspective or opened our eyes to new ways of thinking. It is safe to say that for years to come, educators and writers will most likely continue to report on the ways schools changed and adapted to the conditions of the pandemic. However, without a true understanding of the lived experiences of our students, before, during and after the pandemic, our learning from these events will be incomplete. More than anything else, our thoughtful reflection on the pandemic and the ways schools implemented different learning models as discussed in this year's digital learning trends report, has opened our collective eyes to three new truths:

- 1. We can no longer look away from the implicit and explicit inequities in our education systems that go beyond technology access and include differences in the quality of learning experiences, access to learning opportunities, and expectations about who will succeed.
- 2. We cannot assume that just because our schools are open and students and teachers are back in classrooms, that our students are engaged in what they are learning. Student engagement is not a function of simply being in school; rather it is a byproduct of a personalized learning experience that addresses the learner's needs for context, relevancy, and agency.

We must place a higher value on how to unambiguously provide students with 3. opportunities and experiences that support student empowerment and foster the skills students need to acquire to be effective self-directed learners.

To help translate these truths into action, we provide the following suggestions to help school and district leaders leverage what has been learned from the past two years into a roadmap for creating more equitable and engaging learning experiences for all students. These suggestions build on the data and insights shared in this report, but also consider that every school and community have their own unique set of values and needs. The common denominator in each of the suggestions noted here is a focus on engagement, empowerment, and equity. As you continue to contemplate the experiences of the past two years, share your reflections with us so that we may all learn together how to best meet the needs of our students, both today and tomorrow.



#### Let's rethink what we mean by technology use effectiveness in education.

For too long schools and districts have measured the efficacy of technology use by measuring the number of devices deployed or frequency of product usage. Those measures explain "what" but they do not tell a complete picture on "how" technology is used to impact student outcomes or teacher effectiveness. This was very evident during school closures where more devices were deployed than ever before but the quality of the teaching and learning experience using those devices was not always satisfactory. We need to reframe our language from the nouns of technology use to the verbs of impact that explain how digital tools can be used effectively to support deeper learning. This requires a new emphasis on supporting the development of teachers' competencies, confidence and comfort using digital resources to not only engage students but to create new learning experiences that address student needs. Technology has long held the promise of leveling the playing field for students. But that can only happen if our focus is on the quality of the learning experience using technology, not just the mere presence of it in the classroom.



### **Empowering student-teacher relationships to support student agency.**

A key lesson learned from remote learning was how technology can be used to develop stronger connections and bonds between teachers and students. Through texting, emails and two-way conversational apps, students and teachers created new everyday routines that provided students with a sense of agency over their learning process, and helped teachers better understand what their students needed in real time. These types of experiences are the building blocks to create environments where students feel that their schools care about them, that they have an adult they can trust and that their teachers are important for their learning process. School policies and selections for digital communication tools should empower these types of relationship development efforts.



### Deeply understanding and appreciating that "one size fits all" no longer works in learning formats.

The inconvenient reality is that virtual learning was the best learning experience that some students have ever had, and they want to continue to realize the benefits of that



type of an experience. As one student stated in spring 2021 about her virtual learning classes, "I hope my school does not force me to go back to that old way for learning in September. I know that this was not great for all of my classmates but for me it was much better to learn this way." The critical question for a school district today should not be if they should offer an online option for their students, but rather, what is needed to make sure that the online learning we are offering are all high-quality experiences, leveraging the best practices that are in the field about effective virtual learning, and available to all students who want or need that type of learning.

### Engagement in learning starts with the culture of your school.

The conventional wisdom is that students' engagement in learning in school is simply predicated on the teaching style being used or the content being taught. While those two factors may still play a role in sparking or diminishing students' engagement in learning, school culture can also be a determining factor that needs further exploration. Students overwhelmingly like learning and want to do well in school. Yet, despite those beliefs, too many students feel that the culture at their school, the norms and values expressed through policies and programs, does not recognize their individuality, or address their needs as a learner and as a member of the school community. Given that only 50% of students feel engaged in what they are learning, it is long overdue that we examine the level in which our school culture DNA is truly inclusive and representative of our student population as a means to understanding how to address the engagement gap.

#### To address equity in education, start by asking your students about their ideas.

One of the best but frequently underutilized assets you have as a school or district leader is that your students have good ideas about how to improve your school and education in general. And they are willing to share those good ideas with you, if you are courageous enough to ask. This is especially true about how to create more equitable learning experiences for all students. Our students have been observing inequities in the education process for years but have been powerless to change the status quo. They know that some students are lucky enough to get the best teachers, and some are not. They know that some students have access to home resources to support their learning, and some do not. They know that disciplinary policies affect some students more than others. And they know that learning experiences are not always equitable, even if your school mission statement says they are. And many of your students, by virtue of their passion for social justice and equity, their determination to learn about the world beyond their community, and their dedication to building a better world, have thought long and hard about how to change the inequities they see every day. Why not start a new journey this school year to address these equity challenges, to engage your students in real world problem solving, and help them develop stronger self-agency, by asking them for their ideas?

### Read the 2020 Executive Brief Series: 90 Days That Changed K-12 **Teaching & Learning**

Dive into the 2020 Project Tomorrow research with this series of four executive briefs that examine key findings from the spring 2020 shift to digital and remote learning due to the COVID-19 pandemic. This series is a collaboration between Project Tomorrow and Blackboard. Visit content.blackboard.com/90DaySeries.

#### **About Project Tomorrow**

Project Tomorrow's nonprofit mission is to support the effective implementation of research-based learning experiences for students in K-12 schools. Project Tomorrow is particularly interested in the role of digital tools, content and resources in supporting students' development of college and career ready skills. The organization's landmark research is the Speak Up Research Project which annually polls K-12 students, parents, educators and community members about the impact of technology resources on learning experiences both in school and out of school, and represents the largest collection of authentic, unfiltered stakeholder voice on digital learning. Since 2003, almost 6 million K-12 students, parents, teachers, librarians, principals, technology leaders, district administrators and members of the community have shared their views and ideas through the Speak Up Project. Learn more at www.tomorrow.org.

#### **About Blackboard**

Blackboard's unique approach to K-12 education focuses on creating a seamless and engaging experience for each learner. Our platform provides a way for students to learn in a safe, connected, and technologically savvy environment by focusing in advancing personalized learning and engaging and informing the entire community. For more information visit:

- https://www.blackboard.com/industries/k-12
- https://twitter.com/BlackboardK12
- https://www.facebook.com/BlackboardK12

